

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE <div style="text-align: center;">J</div>		PAGE OF PAGES <div style="text-align: center;">1 3</div>	
AMENDMENT/MODIFICATION NO. <div style="text-align: center;">0001</div>		3. EFFECTIVE DATE <div style="text-align: center;">17-Mar-2004</div>		4. REQUISITION/PURCHASE REQ. NO. W38XDD-4058-9657		5. PROJECT NO.(If applicable)	
6. ISSUED BY CODE US ARMY CORPS OF ENG.-NASHVILLE DISTRICT CELRN-CT, ROOM A604 110 NINTH AVE. SOUTH P O BOX 1070 NASHVILLE TN 37202-1070		7. ADMINISTERED BY (If other than item 6) CODE H3P0000 CONTRACTING DIVISION (JWP) EMAIL: JAMES.W.PURCELL@USACE.ARMY.MIL TEL: 615/736/7569 FAX: 615/736/7124 NASHVILLE TN 37202-1070					
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. W912P5-04-T-0026	
				X		9B. DATED (SEE ITEM 11) 10-Mar-2004	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Solicitation W912P5-04-T-0026 is hereby amended to revise Section C., specifications, Statement of Work. Replace pages C-1 and C-2 with attached pages C-1 and C-2. No other changes.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				TEL: _____ EMAIL: _____			
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED	

SUMMARY OF CHANGES

SECTION SF 1449 - CONTINUATION SHEET

The following have been modified:

SPECIFICATIONS

**SECTION C
SPECIFICATIONS
FOR
REPAIR OF HYDROELECTRIC GENERATOR
THRUST BEARING SHOES AND THRUST BEARING RUNNER**

1. DESCRIPTION OF WORK. The Contractor shall furnish all labor, materials, plant, and equipment to place in first class condition twelve (12) generator thrust bearing shoes and one (1) thrust bearing runner in strict accordance with the requirements of these specifications. Attached sketches are FOR INFORMATION ONLY.

2. SHIPMENT. The Contractor shall pick up the shoes and runner at Wolf Creek Powerplant and deliver back to Wolf Creek Powerplant upon completion of work.

3. BABBITT. The babbitt shall be in accordance with American Society for Testing and Materials (ASTM) Standard B23-94 Alloy No. 2. The Contractor shall submit babbitt certification as required in ASTM B23 Section 11.

4. DETAILS OF WORK.

4.1 Thrust Bearing Shoes

4.1.1. The Contractor shall examine the shoes upon receipt paying special attention to the existing features of the shoe. A print shall be drafted and accurate measurements and details shall be recorded. The existing babbitt shall be removed from the shoes by an approved method and the surfaces shall be properly chemically cleaned to accept babbitt.

4.1.2. A form, which is to be manufactured by the Contractor, shall be installed on the shoe and shoe heated to babbitt receiving temperature.

4.1.3. The babbitt shall be heated to pouring temperature, stirred, dross removed and poured into the shoe. Cooling shall be as prescribed by mass of shoe.

4.1.4. The Contractor shall manufacture a fixture to machine the shoes and a skim cut shall be taken to prepare the surface for ultrasonic testing. (The Contractor shall have in-house testing equipment for these tests.)

4.1.5. The ultrasonic testing must show a minimum of 95% total bond per shoe with no single defect larger than 1 square inch. The distance between any two defects shall be greater than two times the total length of any one defect. All edges must show 100% bonding.

4.1.6. The babbitted shoes shall be machined to the proper dimension of 44.125 inches outside radius and 27.938 inches for the inside radius. The shoes shall be finished to 32 RMS finish. Each shoe shall be checked for flatness by "blueing" to a granite surface plate. A minimum of 80% contact shall be achieved.

4.1.7. All edges shall be finished for proper fit. The back of the shoes shall be buffed and all threads chased.

- 4.1.8. All non-painted non-babbitted shoe surfaces shall be coated with a lubricant for corrosion protection.
- 4.1.9. The shoes shall be boxed in such a way as to protect the babbitted surface against damage during shipment.
- 4.1.10. The Contracting Officer's representative will examine the shoes after finishing but prior to shipment.

4.2. Thrust Bearing Runner

4.2.1. The Contractor shall examine the runner upon receipt, paying special attention to the existing features of the runner. A print shall be drafted and accurate measurements and details shall be recorded.

4.2.2. The runner is fabricated from fine grain hard cast iron. The Contractor shall dust cut runner joint faces and remachine keyways. The Contractor shall manufacture new keys for a 0.0005" to 0.0008" interference fit. The runner shall be assembled and joint screws torqued to 500 ft-lbs. The shaft mating surface shall be finished to 16 RMS. The inside diameter shall be bored to 55.750". The bearing surface shall be lapped to 8 RMS surface finish. Thickness variation of runner along a radial line shall not exceed 0.0005". The runner shall be cleaned, disassembled and joint edges shall be radiused to 0.010" to 0.015" radius.

4.2.3. All non-painted runner surfaces shall be coated with a lubricant for corrosion protection.

4.2.4. The runner shall be boxed in such a way as to protect it against damage during shipment.

5. TESTING REQUIREMENTS

5.1. Ultrasonic Testing (UT)

5.1.1. The Contractor shall ultrasonic test 100% of the babbitt area of each shoe to ensure sound bond to the base material. Testing shall be by the pulse-echo method.

5.1.2. The Contractor shall provide written record showing results of the testing as required by this procedure.

5.1.3. Frequency shall be 2.25 or 5Mhz longitudinal mode.

5.1.4. Crystal size shall allow good contact with the babbitt surface. Maximum diameter shall be 1-1/8". Smaller transducer may be used when further investigation of indications is required.

5.1.5. Reference blocks shall consist of soundly babbitted steel block with scanning surface representative of the bearing surface. The block shall be used to set the sensitivity of the instrument. A reference block with unbonded areas shall be provided for comparison of indications for areas showing bond and lack of bond.

5.1.6. Test sensitivity shall be such that the babbitt to base material interface is readily identified on the CRT. Details of sensitivity calibration and determination of bond and unbond areas shall be defined.

5.1.7. The report of the final UT examination shall contain the manufacturer's identification number, authorized signature, date, inspection procedure, test frequency, instrument, type and size of transducer employed, all areas of unbond and the location of repaired areas.

5.1.8. A continuous loss of back reflection greater than 50% over any single area exceeding 1% of the babbitted area shall be mapped and recorded providing the reason for loss of back reflection is unknown. Such areas shall be included in the final UT examination report.